



App. Dkt. P67239US0  
10/01,965

## AMENDMENTS TO THE CLAIMS

This listing will replace all prior versions, and listings, of claims in the application:

### Listing of Claims:

1. (currently amended) ~~Device~~ Apparatus for producing a predeterminable volume of precleaned components of solution mixtures in a vacuum unit for concentrating a solution mixture comprising:

~~with a metering device for the solution mixture to determine a measured sample quantity; ;~~

a liquid pump connected to a liquid reservoir and adding a carrier liquid to said solution mixture, said pump supplying a constant flow rate of said carrier liquid;

~~separator that is downstream of said metering device and is intended to separate out undesired components contained in the solution mixture~~ a liquid chromatographic column through which said sample quantity determined by said metering device is passed together with said carrier liquid; and

~~, and a vacuum unit for concentrating the solution mixture, which is precleaned in the separator, to the predetermined volume, characterized in that a conveyor (6) having a predeterminable rate of flow is upstream of the separator (8) and a device (10) coupling said column to said vacuum unit and for preventing said constant the flow rate of the conveyor from being affected by the vacuum present in the vacuum unit is upstream of the vacuum unit (12).~~

2. (currently amended) ~~The apparatus Device as claimed in~~ of claim 1, characterized in that the conveyor is a liquid pump (6) which is connected to a liquid reservoir (4) and which adds to the quantity of solution mixture that is determined by the metering device (2) a carrier liquid (5), which is conveyed together with the solution mixture through the separator (8) wherein the device coupling said column to said vacuum unit includes a back pressure regulator.

3. (currently amended) ~~The apparatus Device as claimed in~~ of claim 1, characterized in that the device for preventing an effect on the flow rate is a valve (10) wherein the metering device includes a measured loop of tubing having a defined internal volume in which the volume of an injected sample solution mixture can be determined.

4. (currently amended) ~~The apparatus Device as claimed in~~ of claim 12, characterized in that the back pressure regulator (10) is installed as the valve wherein the metering device includes a measured loop of tubing having a defined internal volume in which the volume of an injected sample solution mixture can be determined.

5. (currently amended) ~~The apparatus Device as claimed in~~ of claim 12, characterized in that wherein the back pressure regulator includes a cylindrical housing, in which a sealing element (10e) can be pressed in the direction of ~~the~~ an inflow opening of ~~the~~ said housing by means of a helical spring (10b), which can be loaded by means of a set screw (10a).

6.-7.(canceled)

8. (new) Apparatus for producing a predeterminable volume of precleaned components of solution mixtures in a vacuum unit for concentrating said solution mixture comprising:
- a metering device which includes a measured loop of tubing having a defined internal volume in which the volume of an injected sample solution mixture can be determined;
- a liquid pump connected to a liquid reservoir and adding a carrier liquid to said solution mixture, said pump supplying a constant flow rate of said carrier liquid;
- a liquid chromatographic column through which said sample quantity determined by said metering device is passed together with said carrier liquid; and
- a back pressure regulator coupling said column to said vacuum unit and preventing said constant flow rate from being affected by the vacuum present in the vacuum unit.
9. (new) The apparatus of claim 8, wherein said back pressure regulator includes a cylindrical housing, in which a sealing element can be pressed in the direction of an inflow opening of said housing by means of a helical spring, which can be loaded by means of a set screw.
10. (new) The apparatus of claim 8, wherein the sample to be analyzed is fed into said metering device by a two-position, six-way valve.
11. (new) The apparatus of claim 8, wherein the chromatographic column is filled with a separating material selected from the group consisting of:

C18 reverse phase, C4 reverse phase, normal phase silica gel, DEAE anion-exchange, diphenyl reverse-phase, quaternary ion-exchange, gel-permeation, and affinity media.

12. (new) The apparatus of claim 8, wherein said vacuum unit is heated.

13. (new) The apparatus of claim 8, wherein the sample to be analyzed is contained within an autosampler which can feed the sample into said metering device by a two-position, six-way valve.

14. (new) A method for simultaneously precleaning and producing a predeterminable volume of sample solution mixture comprising adding a predetermined volume of a sample solution mixture to the apparatus of claim 1.

15. (new) A method for simultaneously precleaning and producing a predeterminable volume of sample solution mixture comprising adding a predetermined volume of a sample solution mixture to the apparatus of claim 4.

16. (new) A method for simultaneously precleaning and producing a predeterminable volume of sample solution mixture comprising adding a predetermined volume of a sample solution mixture to the apparatus of claim 8.